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ABSTRACT

Demands for better diffusion of social studies instructional materials became widespread in the 1960s and early 1970s. These demands were largely in response to teachers' curiosity about the wast quantities of new social studies materials; to curriculum developers, desire that their materials be adapted; and to the public insistence on the best results for every educational dollar. A wide variety of models responded to this need for diffusion. Among these models, four are particularly important. The first, the Research, Development, and Liffusion model (R, D & D) is based upon a system of role specialization in which developers design and test innovations while diffusion specialists demonstrate and disseminate the innovation. R, D & D diffusion projects are conducted by professionals, materials based, and often well financed. A second model, the Social Interaction model (S-I) emphasizes the informal social networks through which information flows--such as state social studies councils. A major advantage of this model is that it stresses face-to-face contact at the local level. A third model, the Problem Solver (P-S), focuses upon serving user needs. The client centered focus of the P-S model typically results in a high degree of local commitment to instructional change efforts. The fourth model, Linkage Process, emphasizes the process whereby users interact with resource systems. This model is characterized by a two-way flow of information and is, generally, the most adaptable to a wide range of situations. (Author/DB)

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SFREADING THE WORD: IMPLEMENTING
ALTERNATIVE APPROACHES IN THE
DIFFUSION OF INSTRUCTIONAL MATERIALS
An Overview

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Gerald Marker

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM "

Gerald W. Marker Indiana University

Paper prepared for a Symposium held at the Annual Meeting of the College and University Faculty Assembly of the National Council for the Social Studies

> Cincinnati, Ohio November, 1977

SPREADING THE WORD: IMPLEMENTING ALTERNATIVE APPROACHES IN THE DIFFUSION OF INSTRUCTIONAL MATERIALS An Overview

Growing Interest in Diffusion

If journal articles, sessions at professional meetings, and research studies are taken as indicators the interest in the diffusion of educational innovations has grown rapidly during the past five years. This increasing attention is perhaps best explained by a set of events which occurred in the broader educational scene over the previous decade.

Actions of the federal government partly account for the rising interest in diffusion. The National Science Foundation and the U. S.

Office of Education made substantial investments in curriculum development projects in the 1960's and early 1970's. The next logical step was the diffusion of those innovations. Thus USOE and the Ford Foundation supported programs to train field agents, information specialists, and change agents; people who were prepared to make change happen. Among other skills, such persons were taught to use the storage and retrieval capability of the ERIC centers which USOE had established. In 1974, using funds available in ESEA Title III, the National Diffusion Network and the Dissemination Review Panel were established. The DRP, which later became the Joint Dissemination Review Panel when NIE representation was added, served as a quality control group whose function it was to see that only "proven" programs and materials were disseminated. The NDN provided an information source for state facilitators and state information

specialists. Teacher institutes designed to raise the level of awareness of innovations were funded by both the National Science Foundation and through Title XI of the National Defense Education Act. Teachers and administrators by the hundreds went back to school to learn about "new" math, "new" science, and "new" social studies. An underlying assumption of all these activities seemed to be that if one had invested in the development of curriculum materials then it was reasonable to spend an additional amount of money to insure that potential users were aware of those innovations:

As the decade of the 1960's drew to a close another set of forces which were to produce their own impact on diffusion efforts were also at work. Student unrest was widespread. A combination of increasing school costs, declining enrollments, and declining test scores all worked to generate public demands for the schools to be accountable. When deducation was a "bargin" few caned if it produced results, but with costs rising sharply the public demanded to know what it was getting for its educational dollar. Educators found it important to know if there were a innovations which could help them in their "time of need". Thus potential users joined curriculum developers in pressing for the wider dissemination of educational innovations.

Spreading the Word: Searching for the Best Solution

As the need for the diffusion of information became increasingly apparent a wide variety of diffusion models was employed. Some diffusion

people became advocates of specific methods while others approached the task much like a campaign manager, i.e., they tried a little of everything. What diffusers tried depended upon a number of things. The very nature of the innovations themselves called for different diffusion strategies. Adopters held widely divergent perceptions of the innovations so that the task of creating awareness and generating interest in them was not always the same. The fact that different types of decision-making processes were required in order for users to adopt an innovation also resulted in the use of different diffusion strategies. Finally, the model to which the change agents subscribed influenced the amount and type of diffusion efforts in which they engaged.

Thus it is little wonder that no single "best" solution was found to the diffusion dilemma.

Choosing a Diffusion Strategy

The approaches described in the paper being presented here today are some indication of the variety of approaches which an be employed in bringing about change. Each represents a strategy with specific advantages and disadvantages depending upon the situation involved. Perhaps this can best be illustrated by an attempt on my part to categorize those change efforts.

The Comparing Political Experiences Diffusion Conferences are an excellent example of the Research, Development, and Diffusion model in

operation. The R, D & D model represents an engineering approach to educational change. Developers working in enriched settings draw upon research findings to develop products designed to solve operational problems. In the R, D & D model, roles are often specialized, i.e., developers design and test innovations while diffusion specialists demonstrate and disseminate the innovation.

As described earlier in this paper, the National Science Foundation and the U. S. Office of Education have both invested substantial amounts in the R, D & D model. Summer institutes and regional diffusion conferences, such as the CPE series, were designed to create awareness of innovations in such a manner that potential adopters would give them a trial. In addition, the ERIC Clearinghouses and the regional laboratories for educational research and development were created to fill out other parts of the model. There is no question that thousands of adopters first learned of educational innovations through such efforts and that those activities were major factors in the eventual adoption of products developed by the R, D projects.

be well financed, they are conducted by professionals who have very clear goals and who know their products, and they are typically materials based. But such activities are not without their problems. Potential adopters sometimes view diffusers as salespersons for a specific innovation, persons trying to "sell" an innovation even if it does not fit the client's needs.

-5-

Because the innovations themselves are usually developed in an enriched setting away from the schools, they frequently suffer from the "not made here, won't work with our kids" image. Some potential users are insulted by developers who "tell them what to do" through the use of highly specific teachers guides, etc.

Because of the MACOS controversy, government efforts in the diffusion arena will be changing. But the fact remains that formalized diffusion activities across the spectrum from the ERIC Clearinghouses to the National Diffusion Network will continue to be an effective means of letting users know what is available.

Unlike the highly formalized R, D & D model, the Social Interaction model (S-I) places the emphasis upon the informal social networks through which information flows. Opinion leaders are key actors in the S-I model. Because of their credibility among other members of the reference group the actions of opinion leaders serve as powerful signals about what innovations are worthy of adoption. State social studies councils are often good examples of social interaction at work. Their members are typically highly regarded opinion leaders. When they speak, explicitly or implicitly, others listen! Council networks have the added advantage of terminating in face-to-face contacts at the local level, the point at which credibility is so important. Thus it is not uncommon for state council leaders to learn of innovations through the more formal R, D & D processes but to then feed them into the.

more informal networks, of which councils are a part. Because, they are controlled by elected boards and draw a majority of their membership from the ranks of classroom teachers they are able to avoid the "big brother" image sometimes associated with the federally funded R, D & D efforts. Due to their voluntary nature, the membership of state councils contains many natural leaders of a type referred to by Rogers and Shoemaker as "early adopters", i.e., people who are highly respected localities. Because of the high degree of respect which others have for them, early adopters, more than any other category, have the greatest degree of opinion leadership in most social systems. It should be noted that similar S-I networks operate in other organizations such as those to which curriculum supervisors, principals and superintendents belong. As Carlson's research has demonstrated, these networks can also be important factors in the change process. 9 But regardless of the network involved reference groups and opinion leaders play an important role in the diffusion of educational innovations.

Perhaps the single greatest weakness of S-I type activities is their heavy reliance on informal or natural diffusion. Convention programs and newsletters are often greatly influenced by the interests of key persons in the organization. This perhaps also accounts for the tendency for such organizations to move on to other topics once they have "none" something. The pressure to be "on the cutting edge" dealing with "current topics" often results in a parade of innovations dealing with things like

ethnic education, moral education, career education, global education, etc. In short, once a topic or innovation has been dealt with it is on its own to work its way through the network. Even so, S-I networks are an important component of the overall diffusion process and help explain how some change occurs. 10

The "bottom-up" approach described in Charles Meyers' paper is perhaps our best example of the Problem Solver (P-S) model in operation. Here the primary focus is upon user needs, needs which are served by an outside consultant. The diagnosis of client needs is an important component of the relationship as is the non-directive stance of the consultant, much in the tradition of Carl Rogers. The strength of such an approach to change stems from the fact that change directly aimed at the users' felt needs is likely to be more long-lasting than change based upon high powered diffusion efforts or change designed to keep-up with the influencials in the network. The client-centered focus of the P-S model also typically results in a high degree of local commitment to the change effort, a feeling that it is "our" solution to the problem, both factors which help to insure the staying power of the innovation."

The federally funded teacher centers will apparently be based, implicitly at least, upon a P-S model since the emphasis will be almost entirely on locally identified needs. In some respects they will act as "consultants" to their client school system and yet some will no doubt employ the periodic services of outside consultants. If the hearings held



by U.S.O.E. are any indication much effort will be devoted to the local development of innovations and it remains to be seen just how much sharing occurs between centers.

upon user needs and the local development of solutions. In the first instance the "felt" needs are not always the "real" needs and it takes a skillful consultant to help make that transition from one to the other in a non-directive and non-threatening way. In the second instance locally developed innovations are often nothing but poorly done cut-and-paster jobs, poor duplicates of the field tested products of the R, D & D centers. Perhaps that accounts for the apparent declining interest in the Problem Solver model and the increasing interest in the next model to be discussed.

It would be difficult to imagine a better example of a Linkage Process Model than that provided by the Social Science Education Consortium. Appropriately enough the SSEC newsletter is even titled, "The Link". Ronald Havelock is one of the primary developers of this model which emphasizes the process whereby users interact with resource systems. As the name implies, the model focuses upon the nature of the linkage between the two systems.

Unlike the often perceived one-way flow in the R, D & D model the linkage model is characterized by a two-way flow of information. As messages flow from the resource system to users the linkage agent translates them into the most usable form. When the flow is reversed the language

changes through the translation task does not. Regardless of the direction of flow the linkage agent attempts to protect the integrity of both systems.

The activities of the SSEC place it squarely between user and resource systems. Numerous SSEC publications like The Data Book, the Curriculum Materials Analysis System, specialized bibliographies, and change manuals are designed with user systems in mind. So also are the workshops and consulting services offered by the organization. Facing the other direction, SSEC interacts with researchers and developers, both components of the resource system. SSEC membership includes persons from both systems and the staff seems to have credibility with both groups.

Because linkers are very responsive to both client groups (users and resource systems) they are often highly effective. In some respects the Linkage Process model takes a broader view than the other models. Because linkers are not tied to specific innovations they are free to range across the spectrum of available options, a luxury not always enjoyed by diffusers in the R, D & D model. While the Linkage model assumes a network it does not rely upon it as the S-I model does. Finally the Linkage Process model does not concentrate solely upon the user, as is the case in the Problem Solver model, and is more concerned with promoting reciprocal feedback between users and the resource systems. On the other hand, linkers attend to all the components of the broader system, i.e., developers, networks, and users, and therein lies the strength of the Linkage Process model.

But as indicated earlier, this comprehensiveness is also the greatest weakness of the model.

It almost goes without saying that the key to the Linkage Process model is the linkage agent. Because such persons stand between two such distinct systems they sometimes find themselves needed by both but accepted by neither, a situation which Havelock has termed "marginality". It is difficult to find of train perople who can speak the languages of both client systems, who can deal with a rapidly growing number of complex educational innovations, who have a wide range of group process skills. In short, linkage agents are difficult to train as well as sustain. Even SSEC finds the linkage role an almost impossible one to fund, especially on a pay-as-you-go basis.

So Where Does That Leave Us?

The papers presented here today represent quite different approaches to the diffusion of educational innovations. In their own right each works. As to which is most effective the only answer can be, it depends! As indicated earlier, when selecting a diffusion strategy one must take into account the nature of the innovation, the perceptions people have of it, how decisions to adopt it will be made, and what assumptions are made about how change occurs. In the long run it seems to me that some form of the Linkage Process approach is likely to prove the most adaptable to a wide range of situations. The federal government now appears willing to

support an educational equivalent to the county agricultural agent, a role that has enjoyed remarkable staying power and versatility. This is not to say that R, D & D efforts will cease, that informal networks will disappear, or that individual process consultants will find no clients. But one can predict that the educational scene will become increasingly complex making it more and more difficult for educators at the local level to keep-up with their options or to make informal choices from among them. Meanwhile, the R & D efforts of the federal government, foundations and universities are not about to go out of business. In short, "go-betweens" will be needed. The problems of training and supporting such persons present us with some interesting opportunities, not to mention an interesting diffusion problem in its own right.

NOTES

¹ For a recent review of the literature in the area of the diffusion of social studies materials see Francis P. Hunkins, et. al., REVIEW OF RESEARCH IN SOCIAL STUDIES EDUCATION: 1970-1975, National Council for the Social Studies, Washington, D.C., 1977.

² Gerald W. Marker and Howard D. Mehlinger, REPORT OF THE SOCIAL STUDIES FIELD AGENT TRAINING PROGRAM, Project No. 5252, Contract No. 0EG-0-70-2023 (725), Indiana University, Bloomington, Indiana, October, 1972.

³ An extensive report on the state information specialist role can be found in Sam D. Sieber, Karen Seashore Louis, and Loya Metzger, THE USE OF EDUCATIONAL KNOWLEDGE, Bureau of Applied Social Research, Columbia University, 1972. Two Volumes, Contract No. OEC-0-70-4930.

- A more general description of change agent roles can be found in Ronald G. Havelock and Mary C. Havelock, TRAINING FOR CHANGE AGENTS: A GUIDE TO THE DESIGN OF TRAINING PROGRAMS IN EDUCATION AND OTHER FIELDS, Center for Research on Utilization of Scientif Knowledge, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan, 1973.
- 4 Shirley Boes Neill, "The National Diffusion Network: A Success Story Ending?", PHI DELTA KAPPA, May 1976, 598-601.
- ⁵ For example, see Carole L. Hahn, "Perceptions of New Social Studies Projects and Their Adoption in Four States", Paper presented to the College and University Faculty at the Annual Meeting of the National Council for the Social Studies, 1974. ED 098 141.
- Good summaries of the research in this area can be found in Robert W. Howe, IMPACT OF NSF SPONSORED PROGRAMS ON ELEMENTARY AND SECONDARY SCHOOL PROGRAMS, TEACHERS AND STUDENTS, mimeo, N.D., 25 pages and the five volume study, FEDERAL PROGRAMS SUPPORTING EDUCATIONAL CHANGE, The Rand Corporation, Santa Monica, California, 1975.
- 7 Karen B. Wiley, "NSF Science Education Controversy: The Issues", SOCIAL SCIENCE EDUCATION NEWSLETTER, No. 26, July 1976, pp. 1-4.
- 8 Everett M. Rogers and F. Floyd Shoemaker, COMMUNICATION OR INNOVATIONS, 2nd. ed., The Free Press, New York, 1971, p. 184.
- 9 Richard O. Carlson, ADOPTION OF EDUCATIONAL INNOVATIONS, The Center for the Advanced Study of Educational Administration, University of Oregon, Eugene, Oregon, 1965.
- 10 For example, see the studies by Switzer and Turner in, Carole L. Hahn, Gerald W. Marker, Thomas J. Switzer, and Mary Jane Turner, THREE STUDIES ON THE PERCEPTION AND UTILIZATION OF, "NEW SOCIAL STUDIES" MATERIALS, Social Science Education Consortium, Boulder, Coloradó, 1977.
- Ronald G. Havelock, "Dissemination and Translation Roles," in Terry L. Eidell and Joanne M. Kitchel, KNOWLEDGE PRODUCTION AND UTILIZATION IN EDUCATIONAL ADMINISTRATION, Center for the Advanced Study of Administration, University of Oregon, Eugene, Oregon, 1968, pp. 64-119.